

## Online Supplementary Material

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### **Health and work in women and men in the welding and electrical trades: how do they differ?**

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#### **Examination of response rates and reasons for non-response**

For WHAT-ME, women in the chosen trades were approached through the training authority of the Province/Territory and the denominator was unknown. However, through a late data sharing agreement with Alberta Apprenticeship and Industry Training, we were permitted to see the record of all apprentices registered in Alberta in the chosen trades from 2005 to 2014. These were used to approach apprentices directly if they were coded as male and had registered from 2005-2012 or were female and had registered for the first time in 2013 or 2014. Until 2013 women in Alberta were approached through the AAIT.

With agreement of the University of Alberta Ethics Board we then selected a random sample of 300 from the list of women registered 2005-2012 who had not joined WHAT-ME to gather reasons for non-response. Of the 300 selected 16 were identified to be men miscoded as women and 3 were found by hand searching to be women already in the study under another name. The remaining 281 were sent a very brief questionnaire. Of these, 61 letters were returned by Canada Post because the householder reported they had moved away or the address no longer existed and 38 responses were received. We do not know how many of the 182 from which we heard nothing received the letter: many householders simply discard mail addressed to someone no longer resident. Of the 38 who responded, 27 recalled receiving some information about the study. From a check list of possible responses (with multiple answers encouraged) 16 of these said that they did not join the study because they did not plan to become pregnant, 14 because they were too busy, 7 because they lost the package forwarded by AAIT, 5 because they were no longer working in the trade, 3 because of worries about confidentiality, 3 because they felt such a study might lead to discrimination against women in the trades and 2 that they were simply not interested.

In order to investigate how representative respondents were of all entering these trades in Alberta we matched all men and women in the four cohorts to the AAIT list from 2005-2014 for women, 2005-2012 for men, and examined information on trade and apprenticeship year for the earliest year they appeared on that list. Inevitably many of the addresses and, for women, names held by AAIT were out of date. For the women only 425 were found on these Alberta lists, 419 of whom were recruited in Alberta (the other 6 having trained also in some other province). This left 97 (18.8%) of the 516 recruited in Alberta unmatched. Among the 1001 men all but 19 were matched. The discrepancy in matching between the sexes reflects in part both the greater tendency of young women to change surname, and perhaps address, and the difference in recruitment practices for the cohorts. As women were scarce, greater efforts were made to recruit through posters in colleges, through local presentations and by word of mouth. Further, any woman in these trades in Alberta who had trained anywhere in Canada was eligible, while men were only approached through the AAIT lists.

There were 3952 women on the Alberta lists for these trades from 2005-2014. With 425 matches in the study this gives a response of 10.8%, rising to 13.1% if it is assumed, as a best case, that all the unmatched were on the lists under another name. The denominator may also be too high, given the proportion (5%) of misclassified men in the random sample of 300 described above. There would also be an unverifiable number of women appearing more than once under different names. Even allowing in some way for these, the maximum estimated response rate would be of the order of 15%. For men the comparison was more straightforward with 982 of 1001 respondents matched from a list of 24077, a response rate of 4.1%

Comparison between Alberta women matched with those unmatched on the AAIT lists (and so assumed not to be in the study) showed no difference on trade (welding, electrical) or year shown as starting the apprenticeship training. Comparison with unmatched Alberta women in the study found that those were unmatched to the AAIT lists were significantly older, more likely to be married (and so presumably to have changed contact details) and to have started their training earlier than those who were matched.

Comparison of men matched on the AAIT lists with those not recruited similarly showed no difference in year starting the apprenticeship or by trade.